

# Do TJ policies cause backlash?

## Evidence from street name changes in Spain

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### Abstract

Memories of old conflicts often shape domestic politics long after these conflicts end. Contemporary debates about past civil wars and/or repressive regimes in different parts of the world suggest that these are sensitive topics that might increase political polarization, particularly when transitional justice policies are implemented and political parties mobilize discontentment with such policies. One such policy recently debated in Spain is removing public symbols linked to a past civil war and subsequent authoritarian regime (i.e., Francoism). However, the empirical evidence on its impact is still limited. This article attempts to fill this gap by examining the political consequences of street renaming. Using a difference-in-differences approach, we show that the removal of Francoist street names has contributed to an increase of electoral support for a new far-right party, Vox, mainly at the expense of a traditional right-wing conservative party, PP. Our results suggest that revisiting the past can cause a backlash among those ideologically aligned with the perpetrator, and that some political parties can capitalize on this.

**Keywords:** transitional justice, voting, conflict memories, Spain

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## Introduction

Memories of contested historical events shape domestic politics across the world. One way in which historical memory is formed and reproduced is through symbols such as statues or street names, and their establishment (or removal) constitutes a policy that is often related to Transitional Justice (TJ) processes in societies emerging from authoritarian or conflicted pasts. These forms of so-called “symbolic TJ policies” are considered important to facilitate national reconciliation.

Yet, symbol policies are not free of controversy. In Ukraine, removing Soviet statues during the ‘Leninopad’ caused a backlash among sympathizers of the old Soviet regime ([Rozenas and Vlasenko, 2021](#)). In the South of the United States, there have been several instances of right-wing or white supremacist protests when statues of Confederates have been torn down, and there is a heated policy and scholarly debate about whether these statues should remain in public spaces or not ([Grossman, 2016](#)).

In this study, we explore whether symbolic TJ policies cause a backlash. If yes, what are the political consequences of such backlash? Social movements or political parties can capitalize on grievances about the removal of symbols of a past regime to build further support. We probe into a potential backlash effect of the removal of public symbols linked to the Francoist regime in Spain, where memories of this dictatorship are divisive and potentially polarizing ([Balcells, 2012](#)). Our design exploits some of the changes brought about in Spain by the 2007 Law of Historical Memory (LHM), which introduced a mandate to remove Francoist symbols from public spaces, including street names. We examine whether street renaming generated an increase in electoral support for Vox, a relatively new far-right party that is gaining ground in Spain.

Traditional conservative parties in Spain have generally opposed TJ policies and have been adamant about sticking to the ‘pact of forgetting’ that characterized the transition to democracy in the late 1970s (e.g. [Fuente, 1980](#)). Yet, the Spanish far-right is more resolute in exonerating the Francoist regime and defending its memory. In response to recent TJ policies promoted by a left-wing government, Vox has fiercely tried to capitalize on discontentment among Spaniards who do not support such policies.<sup>1</sup> This party has been

vocally opposed to the removal of Francoist symbols from public spaces or to the transfer of Francisco Franco's remains from the Valley of the Fallen's mausoleum to a private grave ([Taladrid, 2019](#)). Vox has characterized the LHM as an instrument of leftist propaganda, has claimed that Spain's national unity is the path to overcome historical divisions, and has unabashedly whitewashed Francisco Franco's figure. However, we do not know whether this strategy has electorally benefited Vox or not, and identifying causality is thorny because of confounding events. For example, during the 2017 secessionist crisis in Catalonia, Vox was actively involved in the judicial prosecution of separatist leaders, posing as the true guarantor of Spanish territorial unity. The latter probably had an impact on its territorial performance in the 2019 elections.

We implement a difference-in-differences (DiD) design where we analyze the impact of Francoist street renaming on the growth in Vox's electoral support between 2016 and 2019. We find that support for Vox increased around 6% more in municipalities where there was a Francoist street renaming between June 2016 and April 2019 than in places without such replacements. Support for the Partido Popular (PP) decreased 8% more in those same municipalities, while support for the socialist party (PSOE) did not vary. This finding suggests a potential effect of these removals to increased asymmetric polarization, where only one sector of society (in this case, the right) radicalizes.

## The effects of “symbolic” TJ policies

After regime transitions or violent episodes, countries face the need to come to terms with the past ([Elster, 2004](#)). To this end, countries often rely on different TJ policies, such as trials, truth commissions, reparations, amnesties, or “symbolic” measures like museums or memorials ([De Brito et al., 2001; Elster, 2004; Balasco, 2013](#)). All these various measures aim to serve justice, redress grievances, and reduce the probability of conflict recurrence ([Loyle and Appel, 2017](#)). However, the short-term and long-term and consequences of TJ policies are still not clear.

Many scholars praise TJ policies, arguing that they increase the prospect for democracy ([Elster, 2004; Sikkink and Walling, 2007](#)) and reduce the risk of future conflict by

increasing accountability for past victimization (Kim and Sikkink, 2010; Meernik et al., 2010) and redressing grievances (Akhavan, 1998; Loyle and Appel, 2017). Other authors posit that the positive view on TJ policies is overly optimistic and that there is scant evidence supporting a beneficial effect (Mendeloff, 2004; Thoms et al., 2010). Some even claim that TJ policies can harm reconciliation and conflict because they can renew social tensions in divided societies (Snyder and Vinjamuri, 2004).

In an attempt to shed light on this debate, Capoccia and Pop-Eleches (2020) study the impact of TJ trials on democratic attitudes in West Germany and find heterogeneous effects depending on the type of punishment and the group identity of the defendants. Balcells et al. (2020), for their part, study the impact of TJ museums with a field experiment in Santiago, Chile. They find that a single TJ museum visit can have reconciliatory and pro-democratic effects, and document no evidence of a backlash among those ideologically close to the Pinochet regime.

We aim to contribute to this literature by exploring the effects of a particular subset of TJ policies: removing symbols of a past regime from public spaces. We focus on Francoist street renaming in Spain. Just like the removal of statues and symbols, the building of museums or the establishment of historical markers (Ward, 2021), street renaming is a symbolic TJ policy (Aguilar et al., 2011). Symbolic TJ intertwines with the politics of memory, which involve “the shaping of collective memory by political actors and institutions” (Zubrzycki and Woźny, 2020, 176). While there has been significant research on other aspects of TJ policies such as trials, reparations, or lustration (Nalepa, 2010; Loyle and Appel, 2017; Voytas, 2021), the study of symbolic TJ is relatively underdeveloped.

In Spain, the 2007 LHM, promoted by a left-wing (PSOE) government, constituted an attempt to redress long-held grievances by the victims of the Nationalist side in the civil war (1936–1939) and the Francoist regime (1939–1977). It included provisions for the removal of Francoist symbols from public spaces, such as street names and monuments. Indeed, while many local governments had removed Francoist street names right after the transition to democracy, hundreds of municipalities had kept them because the historical memory issue was not salient or because local politicians deliberately avoided it. The 2007 Law prompted municipal governments to be proactive and offered local associations

a legal platform to pressure their local councils to remove Francoist symbols. Anecdotally, we know that these policies generated some backlash among Spanish right-wing citizens (e.g. [Ezquiaga, 2021](#)). Yet, we do not know if this backlash was systematic or the extent to which it benefited the far-right, which tried to exploit it electorally. We test this hypothesis with local-level data.

## Empirics

We implement a DiD design analyzing the effect of Francoist street name removals on the growth in local electoral support for Vox between two different general elections in June 2016 and April 2019. We focus on this period because Vox first participated in national elections in December 2015, and 2016–2019 is the only long enough electoral period in which it is possible to measure changes in its electoral share. Moreover, during this period, Vox experienced a surge in electoral support and turned into a critical electoral player in Spanish politics ([Turnbull-Dugarte et al., 2020](#)).

We focus on all Spanish municipalities that still had at least one Francoist street name in June 2016. Our models aim to identify whether Vox electorally grew more in municipalities that renamed Francoist streets than in those that did not.

### *Francoist street name removal*

To build our main independent variable, we use data from the Spanish National Statistical Institute ([INE, 2020](#)) identifying all street names in Spain at different points in time. The INE offers data on all existing streets on June 30th and December 31st every year since 2010 (it also provides one-time data for June 2001). Using the official ID number for each street, we can track name changes over time.

To identify streets named after Francoist symbols or figures, we use the list published by the Madrid City Council in 2017, following a report by a specially designated commission.<sup>2</sup> We expand it by including prominent Francoist names (e.g., ‘José Antonio’, ‘Calvo Sotelo’, ‘Generalísimo’, ‘General Franco’) that the city of Madrid had already removed

before 2017.<sup>3</sup> Our main variable is a binary indicator of Francoist street name removal between June 30th, 2016 and December 31st, 2018.<sup>4</sup>

Figure 1 shows the number of Francoist street name removals during every six-month period since 2011. We can see that there is a spike after 2016, precisely during the period we examine. There are several reasons for this peak. First, after the 2007 LHM, there were legal battles or lobbying campaigns to remove Francoist names, which dragged for some time and started to resolve after 2016. In mid-2016, Olmedo, Valladolid, became the first municipality to be sentenced for not complying with the 2007 LHM ([El Norte de Castilla, 2016](#)). Second, after 2015, there was increased institutional activity in favor of street renaming, partly as a result of the PP losing grip of several municipal and regional governments in the 2015 elections (e.g. [Vázquez, 2016](#); [El Comercio, 2016](#)). We show more information on street name changes over time in the Appendix (section A4).

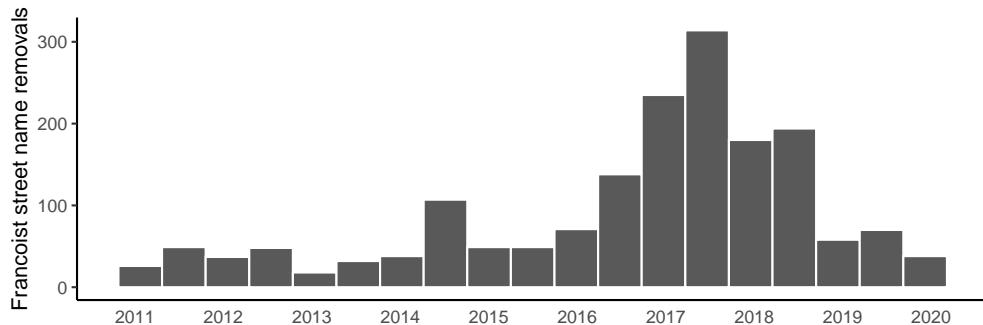


Figure 1: Number of Francoist street name removals over time (2011-2020)

### Variables

Our primary dependent variable is the percentage of electoral support for Vox. We obtained the data from the Spanish Ministry of Interior<sup>5</sup> and calculated the share of valid votes for Vox in each municipality in the 2016 and 2019 general elections.<sup>6</sup>

In addition, we also examine the electoral share of two mainstream parties, the Popular Party (*Partido Popular*, PP), at the right, and the socialist party (*Partido Socialista Obrero Español*, PSOE), at the left, to capture local shifts in political preferences.

We include a series of control variables at the local level. In particular, we include turnout in the June 2016 elections, (logged) population from the 2011 census, the (logged) number of Francoist street names in June 2016, the unemployment rate in January 2016, and a binary indicator of whether a leftist mayor won the May 2015 municipal elections. In addition, we also include fixed effects at the region level (Autonomous Communities). We show summary statistics of all variables in the Appendix (section A2).

### *Models*

We run OLS regressions on the electoral support for Vox, PP, and PSOE in the June 2016 and April 2019 elections as dependent variables, using an indicator of Francoist street name removal between June 2016 and December 2018 as our main independent variable.

We define the DiD model as:

$$Y_{it} = \beta_0 + \beta_1 Removal_i + \beta_2 April2019_t + \beta_3 (Removal_i \times April2019_t) + \beta^\top \mathbf{x}_i + \alpha_r + \epsilon_{it} \quad (1)$$

Where  $Y_{it}$  is the share of support for Vox in municipality  $i$  and election  $t$ ,  $\mathbf{x}_i$  is a vector of covariates,  $\alpha_r$  are region fixed effects, and  $\epsilon_{it}$  is the error term. The effect of street name removals is captured by  $\beta_3$ , the interaction between the  $t_1$  (April 2019) and treatment (Francoist street name removal) indicators.

As argued above, we only examine municipalities that still had Francoist street names in June 2016. Table 1 shows how many of them renamed Francoist streets during the period of study. Moreover, we limit the sample to municipalities where Vox participated in June 2016.<sup>7</sup> In the Appendix, we include detailed information about the sample and both treatment and control groups (sections A2-A5), and show models for PP and PSOE using the full sample (section A7).

Focusing on municipalities that still had Francoist street names in 2016 implies that the DiD sample is more rightist than the average in Spain.<sup>8</sup> In the Appendix, we compare municipalities in the sample to those out of the sample (section A5).

Table 1: Sample classification

Francoist names in June 2016?	Removed Francoist names, 2016–2018?	
	No	Yes
No	6455 (100%)	0 (0%)
Yes	1184 (72%)	454 (28%)

Note: Row percentages. Changes in 2016–2018 refer to the period between 30/06/2016 and 31/12/2018.

## Results

Table 2 shows the mean electoral share for each of the three parties in the 2016 and 2019 elections for the treated and control groups and the base difference in differences. A first look shows that support for Vox between 2016 and 2019 increased, on average, 0.74 points more in municipalities that removed Francoist street names during that period than in those that did not, while support for PP and PSOE decreased 1.7 and 0.23 points more, respectively, in those same municipalities.

Table 2: Mean electoral share in sample

Party	June 2016			April 2019			$\Delta_{2019} - \Delta_{2016}$
	Control	Treated	$\Delta$	Control	Treated	$\Delta$	
Vox	0.21	0.21	0	12.54	13.28	0.74	0.74
PP	41.22	46.77	5.55	23.83	27.68	3.85	-1.7
PSOE	29.13	28.01	-1.12	33.38	32.03	-1.35	-0.23

To probe whether the differences above are statistically significant, we run regression models. Table 3 presents the regression results, and figure 2 shows the simulated DiD estimate of Francoist street renaming, using the models with control variables.

The evidence is supportive of the backlash hypothesis. First, Vox increased its support 0.7 points more in municipalities that renamed Francoist street names than in those that did not. Considering that the nation-wide electoral share of Vox in April 2019 was 10.3%,

Table 3: Francoist street name removal and change in electoral support for parties

	VOX (1)	VOX (2)	PP (3)	PP (4)	PSOE (5)	PSOE (6)
(Intercept)	0.056 (0.181)	2.748* (1.337)	34.151*** (0.462)	46.305*** (2.932)	36.467*** (0.414)	28.205*** (2.895)
Francoist st name removal	-0.016 (0.257)	-0.098 (0.262)	3.018*** (0.658)	1.257* (0.574)	-0.484 (0.590)	-0.105 (0.567)
Election April 2019	12.330*** (0.171)	12.319*** (0.167)	-17.390*** (0.438)	-17.350*** (0.366)	4.259*** (0.392)	4.258*** (0.361)
Removal × April 2019	0.739* (0.359)	0.724* (0.351)	-1.697 <sup>+</sup> (0.918)	-1.731* (0.769)	-0.233 (0.823)	-0.243 (0.760)
Controls	No	Yes	No	Yes	No	Yes
CCAA Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,338	2,310	2,338	2,310	2,338	2,310
R <sup>2</sup>	0.756	0.769	0.585	0.705	0.414	0.499
Adjusted R <sup>2</sup>	0.754	0.767	0.582	0.702	0.409	0.493

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . Only municipalities that had at least one street with a Francoist name in  $t_0$  were included in the sample.

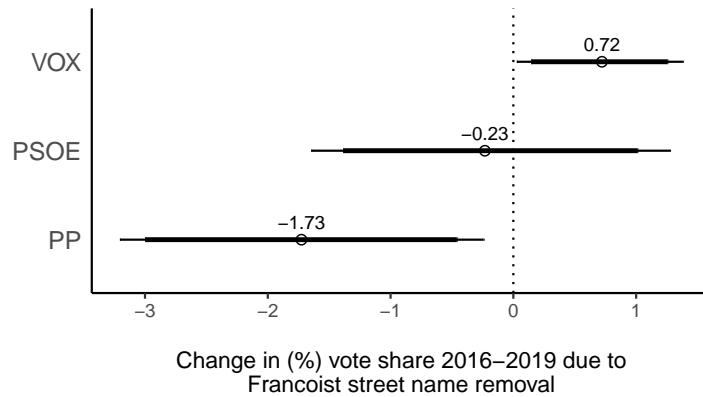


Figure 2: DiD estimates of Francoist street renaming on vote change, obtained from simulations (mean and 90%/95% CIs)

this effect is non-negligible: the change in electoral support was around 6% higher in these municipalities. Second, removing Francoist street names is related to a decrease in electoral support for PP, of almost 1.5 points. Interestingly, it does not significantly affect electoral support for PSOE, indicating that the change in political preferences takes place among rightist individuals. This last result is coherent with the idea that increased sup-

port for the far-right was linked not only to street renaming but to mobilization strategies of the far-right.

Our findings could be confounded if Francoist street renaming was driven by the same factors also explaining a shift to far-right preferences. One possibility is that these street name changes took place in more conservative areas where Spanish nationalism was stronger. In this case, we should see different trends before 2016 between municipalities that later removed Francoist street names and those that did not. Figure 3 shows normalized electoral trends among control and treated groups for PP and Vox. Although data for Vox only goes six months back in time, there are no distinct trends for the two parties for which we find an effect of Francoist street renaming before June 2016. We show data on pre-treatment trends in the Appendix (section A7), even though a strict test of the parallel trends assumption is not possible given the absence of previous data on Vox, which emerged in 2014.

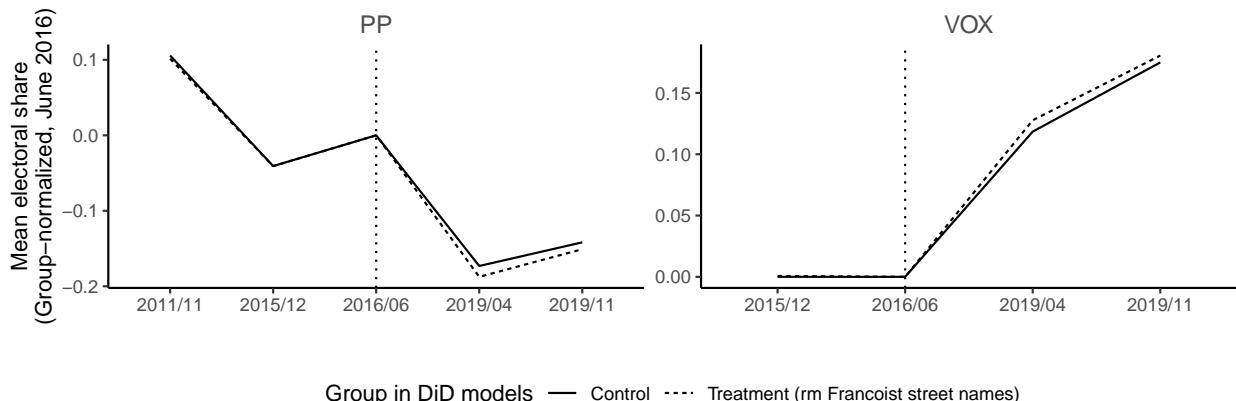


Figure 3: Pre- and post-treatment trends in Vox and PP electoral share

In the Appendix, we include several additional analyses. We present cross-sectional models (section A6) using the independent variable in continuous form, tracking Francoist street name removals during different periods (including changes between 2001 and 2019), and using both support for Vox in the November 2019 elections as well as the change in support between April and November 2019 as dependent variables. The results are coherent with the DiD analyses. They also show that Francoist street name removals account for Vox's growth between 2016 and 2019 but not for the changes between

April and November 2019, which suggests that any local effect due to a backlash over the politics of memory took place mainly during the period we analyze.

Finally, we test the robustness of the DiD results to different specifications (section A7), in particular: including the primary independent variable in continuous form (logged number of street name removals), excluding from the sample municipalities where Vox did not have any votes in 2016, and changing the independent variable so it also includes street renamings registered in the first half of 2019. We also show results from first-difference models (section A8). Results do not significantly change when using alternative specifications and support the main findings.

## Conclusion

Using local-level data, we analyze the political effect of Francoist street renaming in Spain and find evidence in favor of a backlash hypothesis. In the short-term, Francoist street name removals increase support for a far-right party, Vox, which has recently gained steam with a discourse grounded in an authoritarian and an exclusionary version of Spanish nationalism. Vox has grown in these places at the expense of the traditional conservative party, PP, but of the main left-wing party, PSOE, pointing to a process of asymmetric polarization resulting from this policy.

The results from our analyses echo recent debates about symbolic TJ policies and memories of past conflicts in other countries. Our goal is not to take a normative stand against these policies. Despite potential short-term backlash effects, we believe that they can be highly beneficial in the long run (these measures could well contribute to national reconciliation down the road). Moreover, TJ symbolic policies might have these unintended effects only where some political parties take electoral advantage of this issue. In other words, asymmetric polarization does not have to be an automatic outcome of these policies and actions of other political parties can perhaps palliate it. For example, by countering narratives or compensating the aggrieved in other ways (i.e., relocating these symbols into a museum), interested political and social actors could limit the extent to which this discontentment can be opportunistically exploited by more extreme parties.

The extent to which such remedial policies can work is nonetheless out of the scope of this paper.

Finally, while we have focused on the removals of symbols, other TJ policies might not have similar backlash effects. For instance, recent research shows that TJ museums can promote reconciliation ([Balcells et al., 2020](#)), and that reparations can increase political engagement among victims ([Voytas, 2021](#)). The average impact of TJ will depend on how the effects of the different measures add up ([Olsen et al., 2010](#); [Loyle and Appel, 2017](#)). Overall, this article contributes to an open and lively scholarly debate on the effectiveness of TJ policies.

## Notes

<sup>1</sup>Originated in 2013 from a split in the traditional right-wing party PP (Partido Popular), Vox promotes a discourse based on authoritarian conservatism and a hard-line version of Spanish nationalism. It shares with other populist right-wing parties in Europe a nativist ideology and a rejection of immigration, gender policies, and the social welfare state (Turnbull-Dugarte, 2019; Turnbull-Dugarte et al., 2020).

<sup>2</sup>The full list is available online at <https://bit.ly/37cLGgk> (accessed 26/11/2020).

<sup>3</sup>We show the full list in the Appendix (section A1).

<sup>4</sup>See section A3 in the Appendix for more details about the coding.

<sup>5</sup>Results are available at <http://www.infoelectoral.mir.es/> (accessed 03/12/2020).

<sup>6</sup>See section A9 in the Appendix for a timeline of elections in Spain.

<sup>7</sup>Vox was a relatively new party in 2016 and did not field candidates in some provinces.

<sup>8</sup>Municipalities that still had not changed Francoist names by late 2018 were portrayed as the ‘resistance’ to the LHM (Blánco Elipe, 2018). Their dodging of the LHM was possible because of delays in the legal procedures or some form of ‘foot-dragging’ by local authorities.

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Online Appendix for:  
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## A1 Francoist street names

We considered as Francoist the following street names. The starting point was the list published by the Madrid City Council in 2017, where they proposed a list of 52 street names to be removed, following a report by the Historical Memory Commission.<sup>1</sup> This list was expanded, manually selecting from the street names most commonly changed. Indeed, among all the changes between 2001 and 2020, the five most commonly removed street names were all key Francoist figures: 'Jose Antonio,' 'Calvo Sotelo,' 'General Mola,' 'Generalísimo,' and 'General Franco.' The full list:

18 de Julio; Alcalde Conde de Mayalde; Alcazar; Alcazar de Toledo; Alferez Provisional; Almirante Francisco Moreno; Angel del Alcazar; Arco de la Victoria; Arriba Espana; Aunos; Batalla de Belchite; Batalla del Ebro; Caidos; Caidos (de Los); Caidos (los); Caidos de la Division Azul; Caidos Por la Patria; Calvo Sotelo; Calvo Sotelo (de); Capita Cortes; Capitan Cortes; Capitan Cortes (del); Capitan Haya; Capitan Luna; Carlos Pinilla; Carlos Ruiz; Carrero Blanco; Caudillo; Caudillo (del); Cerro de Garabitas; Cirilo Martin Martin; Comandante Franco; Comandante Franco; Comandante Zorita; Conde Vallellano; Crucero Baleares; Defensores del Alcazar; Defensores del Alcazar; Dieciocho de Julio; Diego Salas Pombo; Division Azul; Doctor Vallejo-Nagera; Eduardo Aunos; Ejercito Espanol; El Algabeno; Emilio Jimenez Millas; Falange Espanola; Federico Mayo; Federico Servet; Fernandez Ladreda; Francisco Franco; Franco; Garcia Morato; General; General Aranda; General Asensio Cabanillas; General Cabanellas; General Cabanellas; General Davila; General Fanjul; General Franco; General Garcia de la Herranz; General Garcia Escamez; General Kirkpatrick; General Millan Astray; General Mola; General Mola (del); General Moscardo; General Munoz Grandes; General Orgaz; General

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<sup>1</sup>The full list and the reasons for the choice of each street name is available online at <https://bit.ly/37cLGgk> (accessed 26/11/2020).

Primo de Rivera; General Queipo de Llano; General Rodrigo; General Romero Basart; General Sagardia Ramos; General Saliquet; General Sanjurjo; General Varela; General Yague; Generalisimo; Generalisimo (del); Generalisimo Franco; Gobernador Carlos Ruiz; Hermanos Falco y Alvarez de Toledo; Hermanos Garcia Noblejas; Heroes del Alcazar; Jose Antonio; Jose Antonio (de); Jose Antonio Giron; Jose Antonio Giron; Jose Antonio Primo de Rivera; Jose Luis de Arrese; Jose Maria Peman; Juan Pujol; Juan Vigon; Lepanto; Los Martires; Manuel Sarrion; Martires; Martires (los); Matias Montero; Millan Astray; Munoz Grandes; Onesimo Redondo; Pilar Primo de Rivera; Primero de Octubre; Primo de Rivera; Puerto de los Leones; Queipo de Llano; Ramiro Ledesma; Ramon Franco; Ruiz de Alda; Salas Pombo; Veintiocho de Marzo

## A2 Descriptives

Table A1 shows the summary statistics for the sample included in the main DiD analyses. Figure A1 shows a map of the municipalities included in these analyses, excluding municipalities where Vox did not participate in 2016. Figure A2 shows a map of all the municipalities that still had Francoist street names in June 2016, that is, the full sample used included in the robustness checks for PP and PSOE.

Table A1: Summary statistics for the covariates

Variable	Min	Q1	Median	Mean	Q3	Max
Vox April 2019	0	0.09	0.12	0.13	0.16	0.41
Vox June 2016	0	0	0	0	0	0.05
PP April 2019	0.03	0.18	0.23	0.25	0.3	0.77
PP June 2016	0.07	0.34	0.41	0.42	0.5	0.94
PSOE April 2019	0	0.26	0.32	0.33	0.4	0.68
PSOE June 2016	0	0.21	0.27	0.29	0.36	0.64
Francoist st name removal, 2016-2018	0	0	0	0.35	1	1
Log. Francoist streets, June 2016	0.69	0.69	0.69	0.98	1.1	4.11
Turnout April 2019	0.44	0.74	0.77	0.77	0.81	0.97
Turnout June 2016	0.5	0.7	0.73	0.73	0.77	1
Log. Population 2011	2.83	6.25	7.63	7.74	9.19	14.98
Leftist mayor 2015	0	0	0	0.49	1	1
Unemployment 2016	0	0.06	0.08	0.08	0.11	0.21

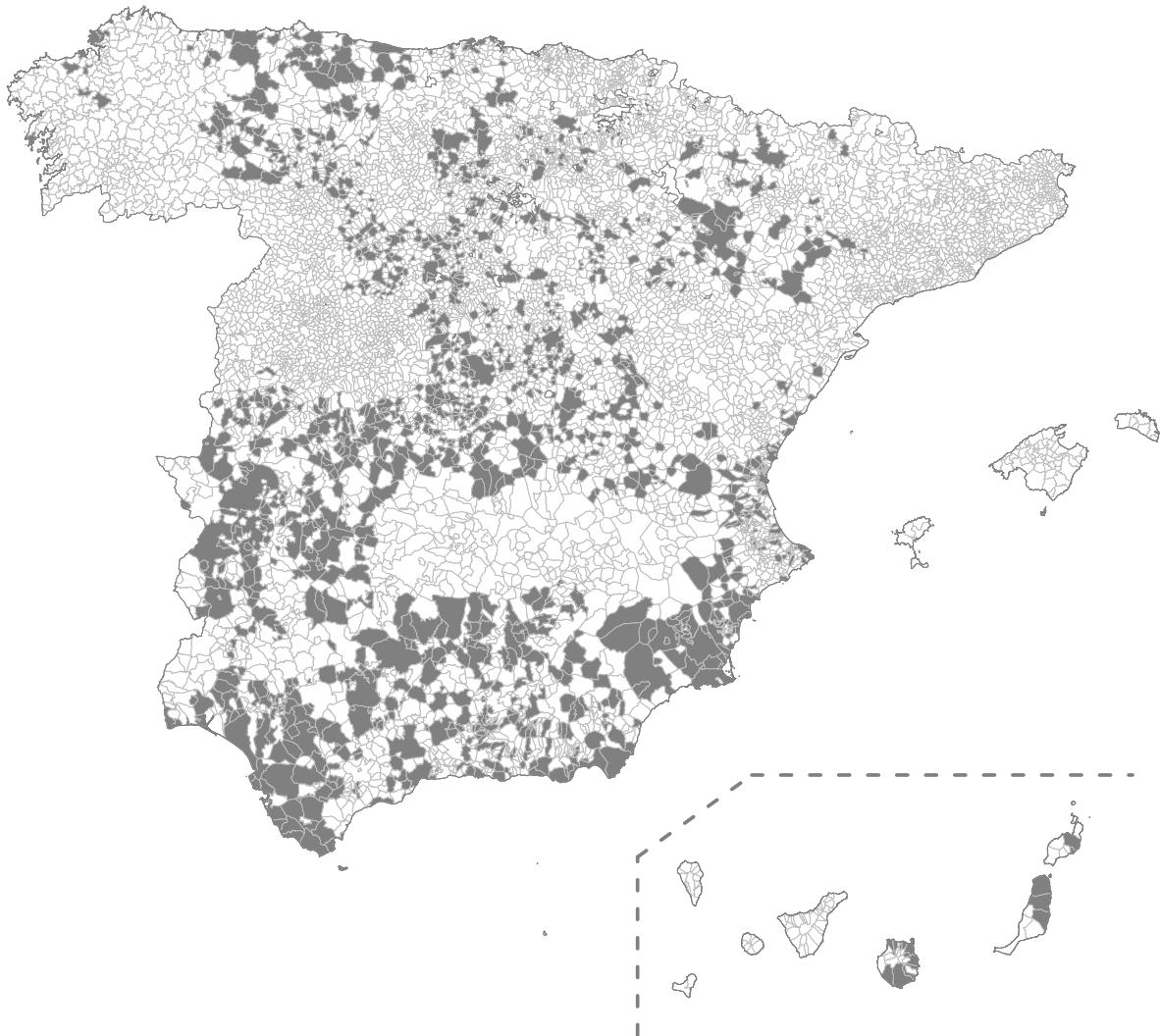


Figure A1: Municipalities included in the main DiD analyses in grey

**Note:** Excluding municipalities where Vox did not participate in 2016 elections.



Figure A2: Municipalities included in the DiD analyses with full sample (PP and PSOE) in grey

**Note:** Including municipalities where Vox did not participate in 2016 elections.

### A3 DiD sample and treatment strength

Figure A3 shows the treatment strength (i.e. the number of Francoist name removals) depending on the number of streets with Francoist names in June 2016. Because of scale problems, the city of Madrid was removed from the graph, even though it follows a similar pattern: Madrid had 60 streets with Francoist names in mid 2016, and removed 52 of those during the period. The graph shows that most streets had very few streets in 2016 and removed those (usually 1 or 2), while a small subset had more streets and removed either all or part of them.

Figure A4 shows the distribution of remaining streets with Francoist names on January 1st, 2019, among those municipalities that were classified as treated in the analyses. Most municipalities that were treated between mid 2016 and late 2018 removed all their streets with Francoist names, and only a small minority retained a small number of Francoist streets (mostly one or two).

In many cases, differences in treatment strength—and the fact that there were remaining Francoist streets names after this period—is due to the fact that the list of Francoist names we use (list in previous section A1) is very comprehensive: many municipalities likely removed the most famous and relevant Francoist names, which arguably were the ones most likely to produce some kind of effect on local political preferences.

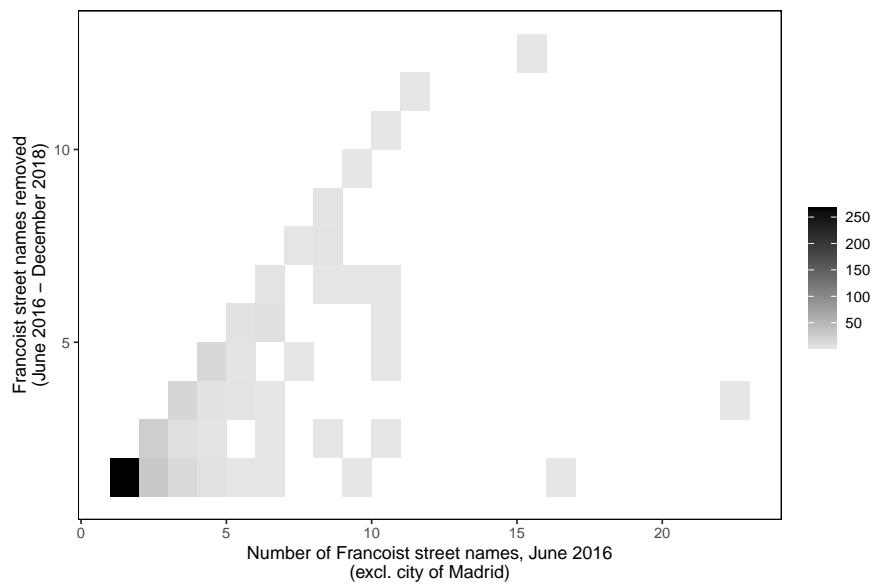


Figure A3: Treatment strength among the treated

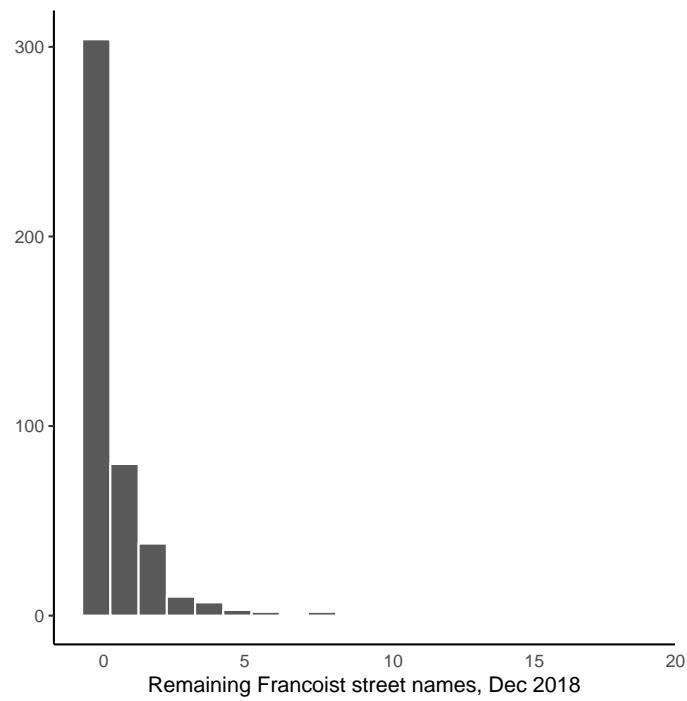


Figure A4: Remaining Francoist streets on treated municipalities 'after treatment'

## A4 Descriptives on Francoist street name removals

Figure A5 shows the number of Francoist street name removals by province in three different time periods: 2001–2020, 2011–2016, and 2016–2018. Figure A6 shows the share of Francoist street by province at three different points in time: June 2001, January 2010, and June 2016. A quick look shows that provinces that removed more Francoist streets during the whole available period are similar to those that removed more Francoist names between 2016 and 2019, which are also provinces that had a higher share of Francoist streets in 2001. These are mostly provinces in central Spain, where Francoist streets were not removed earlier on either because of inertia or ideological opposition, as discussed in the main text.

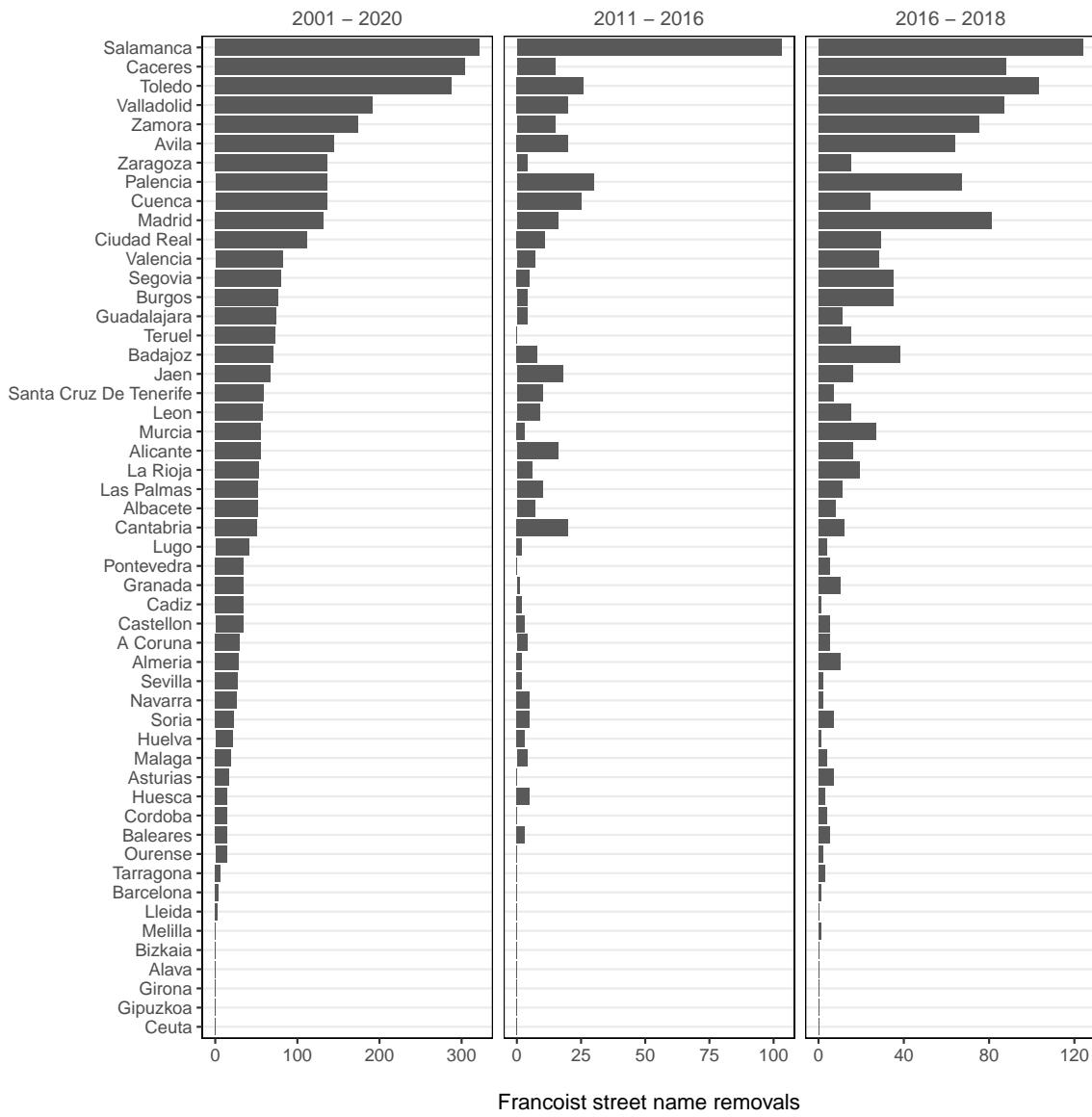


Figure A5: Number of Francoist street name removals over time

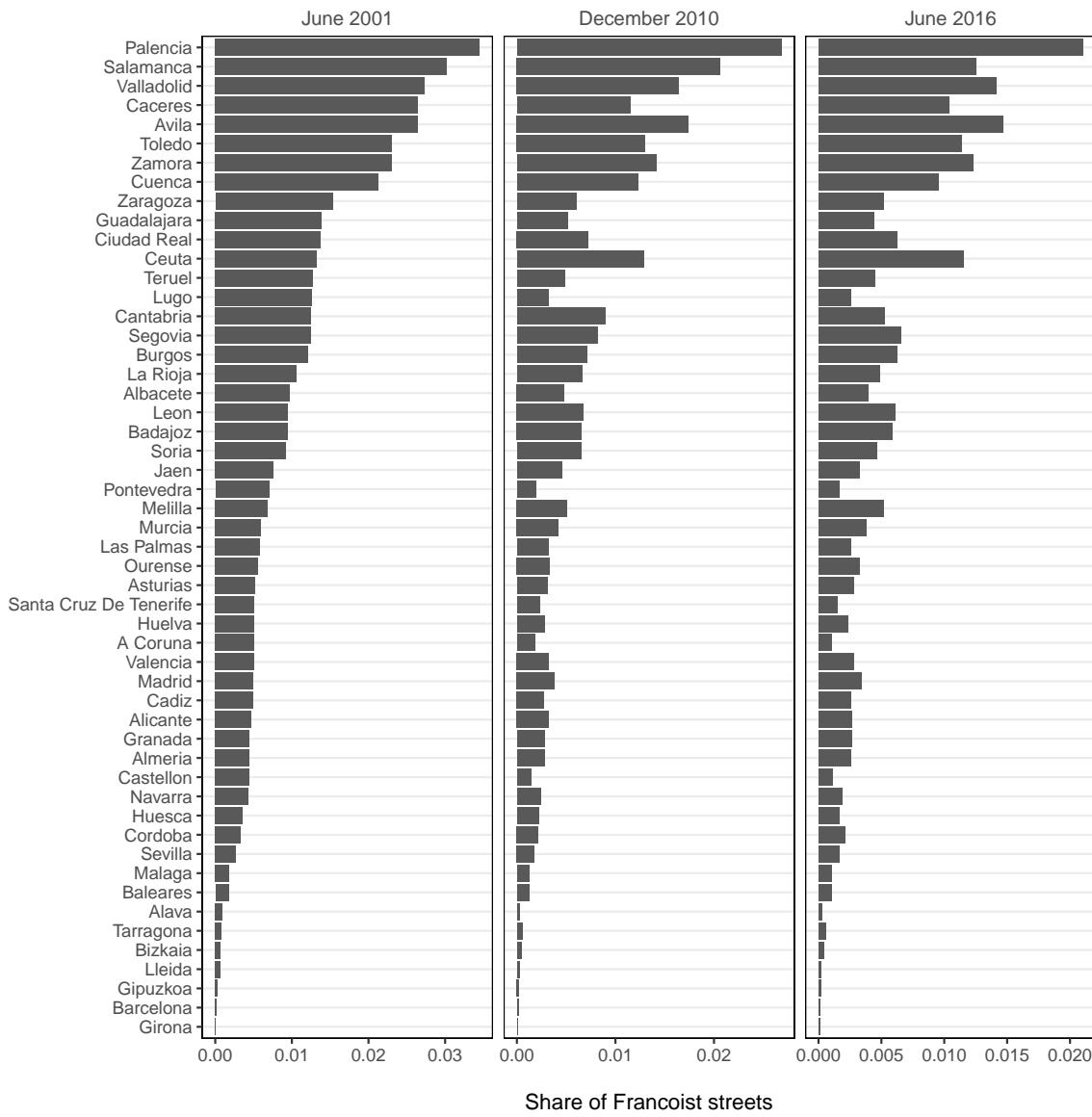


Figure A6: Share of Francoist streets in each province

## A5 Comparing treated vs control and sample vs out-of-sample

One of the main concerns of the main analyses is that treated and control municipalities in the difference-in-differences analyses might not be comparable. To assess this concern empirically, table A2 shows the results of regressing a binary indicator of Francoist street name removal between 2016 and 2018 (the period covered in the DiD analyses in the main text) on a set of explanatory variable. The sample only includes those municipalities that still had Francoist streets in June 2016.

Table A2: Logit regression on Francoist street name removal (2016–2018)

	(1)	(2)	(3)
(Intercept)	0.326*** (0.044)	0.150* (0.062)	-0.289 (0.206)
Leftist mayor 2015	-0.008 (0.021)	0.021 (0.022)	0.024 (0.026)
Log. Population 2011	-0.051*** (0.005)	-0.038*** (0.006)	-0.030*** (0.008)
Log. No. Francoist streets June 2016	0.339*** (0.023)	0.328*** (0.024)	0.342*** (0.027)
PP support, June 2016			0.159 (0.130)
Vox support, June 2016			-2.861 (3.558)
Turnout, June 2016			0.438+ (0.229)
CCAA Fixed Effects	No	Yes	Yes
Observations	1,636	1,636	1,167
Log Likelihood	-867.939	-841.697	-523.509
Akaike Inf. Crit.	1,743.879	1,727.394	1,091.019

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . Only including municipalities that had at least one street with Francoist names in June 2016.

The picture that emerges from these analyses is that mainly smaller municipalities with a high number of Francoist streets at the beginning of the period were the ones were more likely to remove Francoist street names. Interestingly, neither the

election of a leftist mayor in 2015 nor electoral support for Vox and PP in June 2016 elections show any significant relationship with being assigned into treatment.

As depicted in figures [A5](#) and [A6](#), these municipalities were located mostly in the center of Spain.

The core idea of the selection bias is that the sample, because of still having Francoist street names as late as 2016, should be relatively more rightist than the overall sample of Spanish municipalities. Table [A3](#) shows the results of t-tests between municipalities in and out of the sample (i.e. having any Francoist street name in June 2016) on electoral share for PP, PSOE, and Vox in all elections between 2011 and 2019. Interestingly, the data shows that although support for rightist parties was stronger among municipalities that still had Francoist street names in June 2016, support for the center-left PSOE was higher as well. This might be due to the fact that the sample is more likely to include municipalities in the central regions in Spain compared to peripheral regions (i.e., Catalonia and the Basque Country), where the main two parties (PP and PSOE) have on average less support.

Table [A4](#) shows results of logistic regression of electoral support for PP and PSOE on being in the sample (having Francoist street names in June 2016), including CCAA fixed effects and controlling for population. In this case, the results are much more clear: municipalities in the sample show higher levels of electoral support for the right-wing PP.

Going further back in time, table [A5](#) and table [A6](#) repeat these analyses but distinguishing between municipalities that had or did not have Francoist street names in June 2001, the earliest point in time for which we have available data. Moreover, we use data on all elections since 2000. Again, the same patterns emerge. Municipalities that had Francoist street names in later periods were more, on average, more rightist, or at least displayed stronger support for the PP.

Table A3: Mean comparison municipalities in/out of sample (with/without Fran-coist street names in June 2016)

Party	In sample	Out of sample	Diff	P-value
April 2019				
PP	26.72%	23.95%	2.77	0.000***
PSOE	31.72%	28.04%	3.68	0.000***
VOX	12.31%	9.33%	2.97	0.000***
June 2016				
PP	44.42%	38.49%	5.94	0.000***
PSOE	27.21%	23.13%	4.08	0.000***
VOX	0.21%	0.2%	0.01	0.650
December 2015				
PP	40.34%	35.26%	5.08	0.000***
PSOE	27.86%	23.26%	4.6	0.000***
VOX	0.23%	0.22%	0	0.796
November 2011				
PP	54.87%	47.07%	7.8	0.000***
PSOE	31.23%	28.01%	3.23	0.000***

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

Table A4: Voting for PP/PSOE and having a Francoist street name in June 2016

	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)	-0.208*** (0.048)	-0.183*** (0.049)	-0.179*** (0.049)	-0.246*** (0.048)	-0.268*** (0.042)	-0.248*** (0.044)
PP (2000/03)	0.126* (0.052)					
PSOE (2000/03)	-0.149** (0.053)					
PP (2004/03)		0.128* (0.054)				
PSOE (2004/03)		-0.200*** (0.055)				
PP (2008/03)			0.131* (0.056)			
PSOE (2008/03)			-0.197*** (0.055)			
PP (2011/11)				0.212*** (0.051)		
PSOE (2011/11)				-0.157** (0.056)		
PP (2015/12)					0.263*** (0.045)	
PSOE (2015/12)					-0.138** (0.054)	
PP (2016/06)						0.237*** (0.046)
PSOE (2016/06)						-0.175** (0.057)
Log. Pop 2011	0.073*** (0.003)	0.076*** (0.003)	0.074*** (0.003)	0.072*** (0.003)	0.075*** (0.003)	0.074*** (0.003)
CCAA Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,593	7,890	7,893	7,897	7,897	7,897
Akaike Inf. Crit.	6,625.822	6,839.057	6,837.529	6,829.387	6,830.442	6,827.124

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

Table A5: Mean comparison municipalities with/without Francoist street names in June 2001

Party	In sample	Out of sample	Diff	P-value
April 2019				
PP	27.23%	23.47%	3.75	0.000***
PSOE	31.53%	27.75%	3.77	0.000***
VOX	12.22%	9.08%	3.15	0.000***
June 2016				
PP	44.85%	37.74%	7.11	0.000***
PSOE	26.9%	22.86%	4.04	0.000***
VOX	0.21%	0.2%	0.02	0.278
December 2015				
PP	40.85%	34.57%	6.28	0.000***
PSOE	27.5%	22.95%	4.55	0.000***
VOX	0.24%	0.22%	0.02	0.260
November 2011				
PP	55.17%	46.2%	8.96	0.000***
PSOE	31%	27.78%	3.21	0.000***
March 2008				
PP	48.65%	41.07%	7.58	0.000***
PSOE	42.99%	39.63%	3.37	0.000***
March 2004				
PP	48.49%	41.57%	6.92	0.000***
PSOE	42.09%	36.68%	5.41	0.000***
March 2000				
PP	53.18%	46.81%	6.37	0.000***
PSOE	36.21%	31.46%	4.74	0.000***

Note: \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

Table A6: Voting for PP/PSOE and having a Francoist street name in June 2001

	(1)	(2)	(3)	(4)	(5)	(6)
(Intercept)	-0.269*** (0.052)	-0.252*** (0.053)	-0.231*** (0.054)	-0.338*** (0.053)	-0.328*** (0.047)	-0.305*** (0.048)
PP (2000/03)	0.234*** (0.056)					
PSOE (2000/03)	-0.083 (0.058)					
PP (2004/03)		0.239*** (0.059)				
PSOE (2004/03)		-0.125* (0.061)				
PP (2008/03)			0.205*** (0.061)			
PSOE (2008/03)			-0.126* (0.061)			
PP (2011/11)				0.340*** (0.056)		
PSOE (2011/11)				-0.047 (0.062)		
PP (2015/12)					0.358*** (0.050)	
PSOE (2015/12)					-0.066 (0.059)	
PP (2016/06)						0.327*** (0.051)
PSOE (2016/06)						-0.105+ (0.063)
Log. Pop 2011	0.078*** (0.003)	0.081*** (0.003)	0.079*** (0.003)	0.077*** (0.003)	0.082*** (0.003)	0.080*** (0.003)
CCAA Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,593	7,890	7,893	7,897	7,897	7,897
Akaike Inf. Crit.	8,001.884	8,353.067	8,365.240	8,343.314	8,342.123	8,342.252

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

## A6 Cross-sectional analysis

Table A7 shows the basic cross-sectional results, using both binary and continuous versions of the main independent variable, which tracks the removal of Francoist street names for since the oldest data available (June 2001) to December 2018. Table A8 shows the results of cross-sectional analyses similar to the ones in the previous table but using the change in support for Vox between April and November 2019 as the dependent variable. These results that any effect of the removal of Francoist streets took place between the April 2019 elections.

Table A7: Francoist street name removal and electoral support for Vox

	Apr 2019 (1)	Nov 2019 (2)	Apr 2019 (3)	Nov 2019 (4)
(Intercept)	0.120*** (0.018)	0.213*** (0.020)	0.119*** (0.018)	0.211*** (0.020)
Francoist street name removal (log. no)	0.003+ (0.002)	0.005** (0.002)		
Francoist street name removal (dummy)			0.005* (0.002)	0.008** (0.003)
Unemployment 2019	0.042 (0.047)	0.139* (0.058)	0.043 (0.047)	0.141* (0.058)
Turnout April 2019	-0.020 (0.020)		-0.020 (0.020)	
Turnout Nov 2019		-0.086*** (0.023)		-0.086*** (0.023)
Log. Population	0.001+ (0.001)	0.003*** (0.001)	0.002* (0.001)	0.003*** (0.001)
CCAA Fixed Effects	Yes	Yes	Yes	Yes
Observations	2,164	2,165	2,164	2,165
R <sup>2</sup>	0.291	0.317	0.292	0.318
Adjusted R <sup>2</sup>	0.283	0.310	0.284	0.311

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . The main independent variable refers to the removal of Francoist street names between June 2001 and December 2018. Models 3 and 4 only include municipalities that had Francoist street names in June 2001.

Table A8: Francoist street name removal and change in electoral support for Vox during 2019

	Full sample	Limited sample
	(1)	(2)
(Intercept)	2.195*** (0.119)	2.362*** (0.156)
Francoist street name removal	-0.015 (0.020)	0.003 (0.019)
Unemployment 2019	0.518 (0.337)	0.450 (0.404)
Turnout April 2019	-0.623*** (0.133)	-0.799*** (0.178)
Turnout Nov 2019	-0.009+ (0.005)	-0.018** (0.006)
CCAA Fixed Effects	Yes	Yes
Observations	7,552	2,153
R <sup>2</sup>	0.078	0.134
Adjusted R <sup>2</sup>	0.075	0.125

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

The main independent variable refers to the removal of Francoist street names between June 2001 and December 2018. The limited sample corresponds to municipalities that had Francoist street names in June 2001.

Tables A9 and A10 replicate the analyses in the main text—plus the model using the change between April and November as dependent variable—using as independent variable the removal of Francoist streets between 2011 and 2018, using the full and limited samples, respectively. Results point in the same direction as the cross-sectional models in the main text, that is, the removal of Francoist street names is correlated with the increase in support for Vox between 2016 and 2019.

Table A9: Electoral support for Vox and Francoist street name removal (2011–2018)

	Apr 2019	Nov 2019	Change
	(1)	(2)	(3)
(Intercept)	0.078*** (0.009)	0.145*** (0.010)	2.197*** (0.119)
Francoist street name removal	0.010*** (0.002)	0.013*** (0.002)	-0.011 (0.026)
Unemployment 2019	0.083*** (0.025)	0.195*** (0.031)	0.517 (0.337)
Turnout April 2019	0.005 (0.010)		-0.623*** (0.133)
Turnout Nov 2019		-0.037*** (0.011)	
Log. Population	0.003*** (0.000)	0.006*** (0.000)	-0.009+ (0.005)
CCAA Fixed Effects	Yes	Yes	Yes
Observations	7,819	7,820	7,552
R <sup>2</sup>	0.441	0.499	0.078
Adjusted R <sup>2</sup>	0.440	0.497	0.075

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . The main independent variable refers to the removal of Francoist street names between December 2010 and December 2018.

Finally, for comparison, table A11 repeats the cross-sectional analyses but including the main independent variable (the removal of Francoist street names) for different periods, using support for Vox as our dependent variable. In particular, we include street name removals between 2001 and 2015 (*before* our study period), 2001 and 2018 (full period), 2011 and 2018, and 2016 and 2018 (same period as in the main analyses). We only include municipalities that had Francoist street names at

Table A10: Electoral support for Vox and Francoist street name removal (2011–2018), limited sample

	Apr 2019 (1)	Nov 2019 (2)	Change (3)
(Intercept)	0.115*** (0.020)	0.218*** (0.022)	2.476*** (0.174)
Francoist street name removal	0.006* (0.002)	0.007* (0.003)	-0.012 (0.022)
Unemployment 2019	0.002 (0.051)	0.097 (0.062)	0.381 (0.443)
Turnout April 2019	-0.012 (0.023)		-0.901*** (0.200)
Turnout Nov 2019		-0.088*** (0.025)	
Log. Population	0.002* (0.001)	0.003*** (0.001)	-0.023** (0.007)
CCAA Fixed Effects	Yes	Yes	Yes
Observations	1,791	1,792	1,782
R <sup>2</sup>	0.269	0.296	0.129
Adjusted R <sup>2</sup>	0.260	0.287	0.118

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . The main independent variable refers to the removal of Francoist street names between December 2010 and December 2018. Only municipalities that had Francoist street names in December 2010 were included.

the beginning of each period. The results show that the removal of Francoist street names only has a significant correlation with support for Vox when recent name removals are included, i.e., when the independent variable includes removals in 2016 and after.

Table A11: Electoral support for Vox in 2019 and Francoist street name removal across different periods

	2001-2015	2001-2018	2011-2018	2016-2018
	(1)	(2)	(3)	(4)
(Intercept)	0.120*** (0.018)	0.119*** (0.018)	0.115*** (0.020)	0.118*** (0.021)
Francoist street name removal	0.003 (0.002)	0.005* (0.002)	0.006* (0.002)	0.007* (0.003)
Unemployment 2019	0.045 (0.047)	0.043 (0.047)	0.002 (0.051)	-0.031 (0.053)
Turnout April 2019	-0.020 (0.021)	-0.020 (0.020)	-0.012 (0.023)	-0.020 (0.024)
Log. Population	0.001+ (0.001)	0.002* (0.001)	0.002* (0.001)	0.003** (0.001)
CCAA Fixed Effects	Yes	Yes	Yes	Yes
Observations	2,164	2,164	1,791	1,611
R <sup>2</sup>	0.290	0.292	0.269	0.264
Adjusted R <sup>2</sup>	0.283	0.284	0.260	0.254

*Note:* + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . The main independent variable refers to the removal of Francoist street names in different periods: 1) June 2001 - December 2015, 2) June 2001 - December 2018, 3) December 2010 - December 2018, and 4) June 2016 - December 2018. Only municipalities that had Francoist street names at the beginning of each period were included.

## A7 Robustness tests (difference-in-differences)

Table A12 shows the robustness tests for the DiD analyses using electoral support for Vox as the dependent variable, while tables A13 and A14 do the same but using PP and PSOE share, respectively, as the dependent variable. All models in these tables include elections before June 2016: December 2015 in the case of Vox, and all elections since March 2000 for PP and PSOE. Model 2 extends the dependent variable to the first half of 2019, accounting for potential delays in the registration of name changes that could have affected electoral support in April 2019. Model 3 uses the independent variable in continuous form, namely, the logged number of street name removals. Model 4 restricts the sample to municipalities where Vox got more than 0 votes in 2016 elections, to account for potential estimation issues.

The two main takeaways from these results is that the main result does not change across the different specifications and that the parallel trends assumption holds for the two other main parties (PP and PSOE). Even though the absence of data for Vox prior to December 2015 elections (given that the party was founded in 2014) does not allow us to do a strict test of the parallel trends assumption for Vox. In any case, the existence evidence suggests that this should not be a major concern. In the case of Vox, the pre-treatment DiD estimate (December 2015) does not show any statistical significance, while in the case of PP none of the DiD estimates between March 2000 and December 2015 in any of the models is significant either. In the PSOE models, it seems that municipalities that later removed Francoist names showed more support for the PSOE in earlier elections (November 2011 and December 2015), but this result is not robust across all specifications.

Finally, table A15 repeats the main analyses for PP and Vox using normal standard errors, heteroskedasticity-consistent standard errors, and standard errors clustered at the level of municipalities. Although levels of significance go down in the case of Vox, it still retain statistical significance and, in the case of PP, significance increases.

Table A12: Francoist street name removal and change in electoral support for Vox

	(1)	(2)	(3)	(4)
(Intercept)	1.999*	1.972*	2.012*	4.931***
	(0.953)	(0.952)	(0.953)	(1.154)
Francoist street name removal	-0.053	-0.053	-0.146	-0.200
	(0.220)	(0.215)	(0.188)	(0.252)
Election December 2015	-0.105	-0.105	-0.112	-0.127
	(0.148)	(0.149)	(0.144)	(0.158)
Election April 2019	12.319***	12.305***	12.300***	12.898***
	(0.142)	(0.143)	(0.138)	(0.152)
Francoist removal $\times$ Dec 2015	-0.020	-0.015	0.018	-0.043
	(0.313)	(0.306)	(0.253)	(0.361)
Francoist removal $\times$ April 2019	0.724*	0.735*	0.746**	0.789*
	(0.299)	(0.292)	(0.244)	(0.346)
Controls	Yes	Yes	Yes	Yes
CCAA Fixed Effects	Yes	Yes	Yes	Yes
Observations	3,303	3,303	3,303	2,259
R <sup>2</sup>	0.803	0.803	0.803	0.846
Adjusted R <sup>2</sup>	0.801	0.801	0.801	0.844

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . All models also include elections before June 2016 (December 2015). Model 2 extends the DV (name removal) to the first half of 2019. Model 3 uses the IV in continuous form (logged number of changes). Model 4 restricts the sample to municipalities where Vox got more than 0 votes. Controls include a dummy for a leftist major elected in 2015 local elections, logged population in 2011, logged number of Francoist streets in  $t_0$ , turnout in June 2016 elections, and the unemployment rate in January 2016. Only municipalities that had at least one street with a Francoist name in  $t_0$  (June 2016) were included in the sample.

Table A13: Francoist street name removal and change in electoral support for PP

	(1)	(2)	(3)	(4)
(Intercept)	43.725*** (1.522)	43.657*** (1.522)	43.846*** (1.521)	41.813*** (2.101)
Francoist street name removal	0.987+ (0.511)	0.963+ (0.501)	0.823+ (0.436)	0.624 (0.695)
Election March 2000	8.090*** (0.374)	8.014*** (0.379)	8.132*** (0.363)	8.539*** (0.428)
Election March 2004	3.291*** (0.374)	3.273*** (0.379)	3.310*** (0.362)	3.614*** (0.428)
Election March 2008	4.267*** (0.374)	4.264*** (0.379)	4.218*** (0.362)	6.074*** (0.428)
Election November 2011	10.569*** (0.374)	10.561*** (0.379)	10.538*** (0.362)	12.127*** (0.428)
Election December 2015	-4.075*** (0.374)	-4.063*** (0.379)	-4.039*** (0.362)	-4.218*** (0.428)
Election April 2019	-17.381*** (0.376)	-17.343*** (0.380)	-17.379*** (0.364)	-17.657*** (0.428)
Francoist removal × March 2000	-0.105 (0.711)	0.161 (0.697)	-0.240 (0.593)	0.132 (0.970)
Francoist removal × March 2004	0.741 (0.711)	0.754 (0.697)	0.634 (0.593)	0.674 (0.970)
Francoist removal × March 2008	-0.631 (0.711)	-0.581 (0.697)	-0.430 (0.593)	-0.087 (0.970)
Francoist removal × Nov 2011	-0.425 (0.711)	-0.369 (0.697)	-0.295 (0.593)	0.040 (0.970)
Francoist removal × Dec 2015	-0.007 (0.711)	-0.049 (0.697)	-0.132 (0.593)	-0.158 (0.970)
Francoist removal × April 2019	-1.423* (0.712)	-1.466* (0.698)	-1.352* (0.594)	-1.781+ (0.970)
Controls	Yes	Yes	Yes	Yes
CCAA Fixed Effects	Yes	Yes	Yes	Yes
Observations	11,325	11,325	11,325	5,502
R <sup>2</sup>	0.684	0.684	0.683	0.718
Adjusted R <sup>2</sup>	0.683	0.683	0.682	0.717

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . All models also include elections before June 2016 (2000–2015). Model 2 extends the DV (name removal) to the first half of 2019. Model 3 uses the IV in continuous form (logged number of changes). Model 4 restricts the sample to municipalities where Vox got more than 0 votes. Controls include a dummy for a leftist major elected in 2015 local elections, logged population in 2011, logged number of Francoist streets in  $t_0$ , turnout in June 2016 elections, and the unemployment rate in January 2016. Only municipalities that had at least one street with a Francoist name in  $t_0$  (June 2016) were included in the sample.

Table A14: Francoist street name removal and change in electoral support for PSOE

	(1)	(2)	(3)	(4)
(Intercept)	42.613*** (1.440)	42.699*** (1.441)	42.595*** (1.440)	46.737*** (1.970)
Francoist street name removal	-0.566 (0.490)	-0.788 (0.481)	-0.039 (0.415)	0.281 (0.654)
Election March 2000	6.449*** (0.357)	6.420*** (0.361)	6.456*** (0.346)	7.318*** (0.403)
Election March 2004	6.890*** (0.357)	6.827*** (0.361)	6.943*** (0.346)	6.638*** (0.403)
Election March 2008	-5.501*** (0.357)	-5.565*** (0.361)	-5.396*** (0.346)	-6.722*** (0.403)
Election November 2011	-9.073*** (0.357)	-9.160*** (0.361)	-9.044*** (0.346)	-10.213*** (0.403)
Election December 2015	-9.755*** (0.357)	-9.839*** (0.361)	-9.682*** (0.346)	-10.713*** (0.403)
Election April 2019	-5.127*** (0.357)	-5.184*** (0.361)	-5.066*** (0.346)	-6.637*** (0.403)
Francoist removal × March 2000	-1.025 (0.677)	-0.863 (0.664)	-0.994+ (0.563)	-1.003 (0.911)
Francoist removal × March 2004	-0.476 (0.677)	-0.232 (0.664)	-0.632 (0.563)	-0.736 (0.911)
Francoist removal × March 2008	0.402 (0.677)	0.596 (0.664)	0.021 (0.563)	-0.208 (0.911)
Francoist removal × Nov 2011	1.121+ (0.677)	1.344* (0.664)	0.959+ (0.563)	0.419 (0.911)
Francoist removal × Dec 2015	1.235+ (0.677)	1.443* (0.664)	0.916 (0.563)	0.159 (0.911)
Francoist removal × April 2019	0.801 (0.677)	0.946 (0.664)	0.551 (0.563)	0.140 (0.911)
Controls	Yes	Yes	Yes	Yes
CCAA Fixed Effects	Yes	Yes	Yes	Yes
Observations	11,300	11,300	11,300	5,493
R <sup>2</sup>	0.572	0.572	0.572	0.671
Adjusted R <sup>2</sup>	0.570	0.570	0.570	0.669

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . All models also include elections before June 2016 (2000–2015). Model 2 extends the DV (name removal) to the first half of 2019. Model 3 uses the IV in continuous form (logged number of changes). Model 4 restricts the sample to municipalities where Vox got more than 0 votes. Controls include a dummy for a leftist major elected in 2015 local elections, logged population in 2011, logged number of Francoist streets in  $t_0$ , turnout in June 2016 elections, and the unemployment rate in January 2016. Only municipalities that had at least one street with a Francoist name in  $t_0$  (June 2016) were included in the sample.

Table A15: Main models using conventional, robust or clustered SE

	VOX (1)	PP (2)	VOX Het. Robust SE (3)	PP (4)	VOX Clustered SE (5)	PP (6)
(Intercept)	2.748* (1.337)	46.305*** (2.932)	2.748* (1.367)	46.305*** (3.375)	2.748* (1.334)	46.305*** (4.502)
Francoist st name removal	-0.098 (0.262)	1.257* (0.574)	-0.098 (0.130)	1.257* (0.628)	-0.098 (0.130)	1.257+ (0.659)
Election April 2019	12.319*** (0.167)	-17.350*** (0.366)	12.319*** (0.159)	-17.350*** (0.361)	12.319*** (0.171)	-17.350*** (0.188)
Removal × April 2019	0.724* (0.351)	-1.731* (0.769)	0.724+ (0.381)	-1.731* (0.777)	0.724+ (0.403)	-1.731*** (0.431)
CCAA Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,310	2,310	2,310	2,310	2,310	2,310
R <sup>2</sup>	0.769	0.705	0.769	0.705	0.769	0.705
Adjusted R <sup>2</sup>	0.767	0.702	0.767	0.702	0.767	0.702

Note: + $p < 0.1$ ; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ . Clustered SE at the level of municipalities.

## A8 First-difference models

Tables A16 and A17 show first-difference models on the change in electoral support for Vox and PP, respectively, across the three most recent electoral periods and the ones in which Vox participated: between December 2015 and June 2016, June 2016 to April 2019, and April 2019 to November 2019. The results are coherent with the main findings: we only find a significant relationship between the removal of Francoist street names and change in electoral support during the 2016–2019 period, which is positive for Vox (and similar to the main DiD estimate) and negative for PP, even though it only reaches a 90% level of significant in the latter case.

Table A16: First differences model on change in support for Vox

	2015-2016	2016-2019	2019-2019
	(1)	(2)	(3)
(Intercept)	-0.000 (0.000)	0.122*** (0.003)	0.072*** (0.002)
Francoist street name removal	-0.000 (0.000)	0.007* (0.003)	0.001 (0.002)
CCAA Fixed Effects	Yes	Yes	Yes
Observations	1,001	1,169	1,638
R <sup>2</sup>	0.008	0.211	0.158
Adjusted R <sup>2</sup>	-0.005	0.200	0.148

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . The dependent variable refers to the change in support for Vox ( $t_1 - t_0$ ) in each of the three periods. Only municipalities that had at least one street with a Francoist name in  $t_0$  (June 2016) were included in the sample.

Table A17: First differences model on change in support for PP

	2015-2016	2016-2019	2019-2019
	(1)	(2)	(3)
(Intercept)	0.037*** (0.002)	-0.146*** (0.003)	0.022*** (0.002)
Francoist street name removal	-0.001 (0.002)	-0.006 <sup>+</sup> (0.003)	0.001 (0.002)
CCAA Fixed Effects	Yes	Yes	Yes
Observations	1,638	1,619	1,619
R <sup>2</sup>	0.049	0.179	0.058
Adjusted R <sup>2</sup>	0.038	0.170	0.047

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . The dependent variable refers to the change in support for PP ( $t_1 - t_0$ ) in each of the three periods. Only municipalities that had at least one street with a Francoist name in  $t_0$  (June 2016) were included in the sample.

## A9 Timeline of elections in Spain

Table A18: Elections for the Congress of Deputies in Spain

Date	Most voted party	Share
June 1977 <sup>1</sup>	UCD	34.4%
March 1979	UCD	34.8%
October 1982	PSOE	48.1%
June 1986	PSOE	44.1%
October 1989	PSOE	39.6%
June 1993	PSOE	38.8%
March 1996	PP	38.8%
March 2000	PP	44.5%
March 2004	PSOE	32.6%
March 2008	PSOE	43.9%
November 2011	PP	44.6%
December 2015	PP	28.7%
June 2016 <sup>2</sup>	PP	33.0%
April 2019	PSOE	28.7%
November 2019 <sup>2</sup>	PSOE	28.0%

<sup>1</sup> First free elections since the 1930s, electing the Constituent Cortes that would draft a new constitution.

<sup>2</sup> Elections held after failure in government formation.